Commonwealth of Kentucky Division for Air Quality

PERMIT STATEMENT OF BASIS

TITLE V DRAFT PERMIT NO. V-02-024
CSX TRANSPORTATION, INC.
RACELAND, KY.
SEPTEMBER 17, 2002
GENELLE K. FARLEY, REVIEWER
PLANT I.D. # 021-089-00004
APPLICATION LOG # G416 / 51203

SOURCE DESCRIPTION:

CSX Transportation, Inc. operates Raceland Car Shop in Raceland, KY. The primary purpose of this shop is to refurbish railcars and wheel assemblies. Based on their VOC emissions, the shop requires a Title V permit. Greenup county is currently attainment for ozone. The car shop includes an abrasive blasting operation (AB001), a surface coating operation consisting of paint spray booths (SC001), and four 10 MMBtu/hr natural gas-fired heaters. A baghouse controls emission unit AB001 with an efficiency of 99.5% for particulate matter. Emission unit SC001 uses both water and solvent-based paints. All paints have a VOC content less than 3.5lbs/gal. Dry filters with a 90% efficiency are used to control particulate on the surface coating operation. Other items, such as various natural gas-fired heaters/boilers less than 0.5 MMBtu/hr, welding, grinding, machining, storage tanks, solvent use, and aerosol spray painting are insignificant activities.

(03) – SC001, Surface coating operation

DESCRIPTION: Railcars are automatically conveyed through a paint booth where paint is applied using airassisted, airless paint spray guns. All water-based paints are applied using airassisted, airless paint spray guns. Emissions from the painting area are exhausted through seven stacks and dry filters are used to control particulate matter emissions.

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations.

401 KAR 59:225, New miscellaneous metal parts and products surface coating operations.

COMMENTS:

Particulate emissions are controlled by a baghouse that has a 99% design efficiency. Particulate emissions were estimated using the emission factor from KYEIS.

(04) – Clean up solvent, HI SOL 10

<u>DESCRIPTION:</u> Clean up solvent is only used for paint gun cleaning, which is performed in an enclosed container, and for adding to empty totes prior to return shipment to the supplier.

APPLICABLE REGULATIONS:

401 KAR 59:225, New miscellaneous metal parts and products surface coating operations.

(06) – EC100, 4 – 10MMBtu/hr natural gas-fired open flame heaters

DESCRIPTION: Each heating unit has a maximum heating capacity of 10 MMBtu/hr.

APPLICABLE REGULATIONS:

401 KAR 52:020, Title V permits.

(07) – AB001, Abrasive blasting unit

<u>DESCRIPTION:</u> The abrasive blasting unit uses steel shot to blast railcars prior to surface coating. A baghouse with a control efficiency of 99.5% for the particulate matter.

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations.

EMISSION AND OPERATING CAPS DESCRIPTION:

Emission point (03):

Total paint usage for all colors shall not exceed 75 gal/hour and 214,600 gals/year, self imposed limit.

VOC content of each paint shall not equal or exceed 3.5 lbs/gal.

Total particulate emissions shall not exceed 16.4 lbs/hour and 35.2 tons/year.

Visible emission shall not equal or exceed 20% opacity.

Emission point (04):

Clean up solvent usage shall not exceed 4,160 gals/year.

Emission point (07):

Maximum steel shot usages shall not exceed 300 lbs/hour and 600 tons/year.

Particulate emissions shall not exceed 2.34 lbs/hour and 4.68 tons/year.

Visible emission shall not equal or exceed 20% opacity.

PERIODIC MONITORING:

Records shall be maintained of the amount of VOC emitted on a monthly basis.

Recordkeeping consisting of all materials containing VOC's used with VOC content for each and total VOC emissions shall be kept monthly. The total VOC's shall be summarized each month and a 12-month rolling total shall be calculated and recorded.

Semi-annual reports shall be sent to the Division's Ashland regional office showing the monthly and 12 month rolling total VOC emissions as required in the previous statement.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has not incorporated these provisions in its air quality regulations.